5

10

ABSTRACT OF THE DISCLOSURE

There is provided a power rate enhancement circuit for a power amplifier in a dual mode mobile phone including an RF power amplifier for amplifying an RF input signal, a duplexer connected to an antenna, and an isolator connected to the duplexer. The power enhancement circuit also comprises: a CDMA matching circuit connected to an output end of the RF power amplifier, for matching an output impedance of the RF power amplifier in a CDMA mode of operation; an AMPS matching circuit connected to the output end of the RF power amplifier, for matching the output impedance of the RF power amplifier in an AMPS mode of operation; and an RF switch for selecting the CDMA matching circuit or the AMPS matching circuit according to a mode control signal. The CDMA matching circuit comprises an inductor connected between the output end of the RF power amplifier and the isolator. The AMPS matching circuit comprises a capacitor connected between the RF switch and a contact point formed between the inductor and the isolator.